Seat No.: _____   Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER– 6 EXAMINATION – SUMMER -2019

Subject Code: 260004   **Date: 14-05-2019**
Subject Name: Pharmaceutical Chemistry - VIII (Medicinal Chemistry)
Time: 02:30 PM TO 05:30 PM   **Total Marks: 80**
Instructions:
1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Give structure and use of the following. 1) Amitryptiline 2) Indomethacin 3) Morphine 4) Diclofenac 5) Carbamazepine 6) Mefenamic acid	**06**
	(b)	Write structural difference between amphetamine and ephedrine and synthesis of any one.	**05**
	(c)	Why the enzyme Cytochrome called P-450? Explain catalytic reaction cycle involving it.	**05**
Q.2	**(a)**	Explain different theories of receptors.	**06**
	(b)	Explain factors affecting drug metabolism.	**05**
	(c)	Give the synthesis of following drugs: (i) Procaine (ii) Salbutamol	**05**
Q.3	**(a)**	Define and classify cholinergic agents. What are cholinesterase inhibitors? How do they act? Give examples.	**06**
	(b)	Write synthesis of thiopental sodium with mode of action.	**05**
	(c)	What is myasthenia gravis? Write the structures of the drugs used in the treatment of myasthenia gravis.	**05**
Q.4	**(a)**	What are Sedative and Hypnotics. Classify them in detail.	**06**
	(b)	What is Anaesthesia? Write note on General Anaesthetic agents.	**05**
	(c)	Discuss in detail Cognition enhancers.	**05**
Q.5	**(a)**	What is xenobiotics? Describe Phase-I of Xenobiotic metabolism.	**06**
	(b)	Classify Local Anesthetics in detail.	**05**
	(c)	What do you mean by hallucination ? Write a note on hallucinogens.	**05**
Q. 6	**(a)**	Define and classify antiepileptic drugs. Discuss SAR of Benzodiazepines.	**06**
	(b)	Write SAR of barbiturates.	**05**
	(c)	Write a detail note on Antiparkinson's agents.	**05**
Q.7	**(a)**	Classify antidepressants. Describe in detail about MOA, SAR & therapeutic uses of MAO inhibitors.	**06**
	(b)	What is schizophrenia? Explain SAR of Phenothiazine derivatives as CNS depressants.	**05**
	(c)	Discuss drugs used in treatment of gout. Give synthesis of allopurinol.	**05**

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